

Climax or Conclusion: Culmination in the Defense

**A Monograph
by
Major Michael T. Flynn
Military Intelligence**



**School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas**

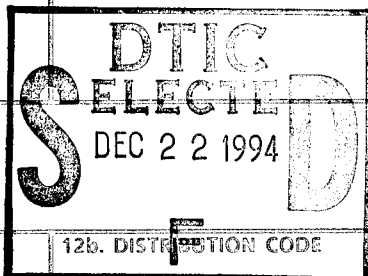
First Term AY93-94

Approved for Public Release; Distribution is Unlimited

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

| | | | | |
|---|--|---|--|--|
| 1. AGENCY USE ONLY (Leave blank) | | 2. REPORT DATE 18/12/93 | 3. REPORT TYPE AND DATES COVERED MONOGRAPH | |
| 4. TITLE AND SUBTITLE CLIMAX OR CONCLUSION: CULMINATION IN THE DEFENSE | | | 5. FUNDING NUMBERS | |
| 6. AUTHOR(S) MAJ MICHAEL T. FLYNN, USA | | | | |
| 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) SCHOOL OF ADVANCED MILITARY STUDIES ATTN: ATZL-SWV FORT LEAVENWORTH, KANSAS 66027-6900 COM (913) 684-3437 AUTOVON 552-3437 | | | 8. PERFORMING ORGANIZATION REPORT NUMBER | |
| 9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED. | | | 10. SPONSORING/MONITORING AGENCY REPORT NUMBER | |
| 11. SUPPLEMENTARY NOTES | | |  | |
| 12a. DISTRIBUTION / AVAILABILITY STATEMENT This document has been approved for public release and its distribution is unlimited. | | | | |
| 13. ABSTRACT (Maximum 200 words) This monograph examines the definition of the term culmination for the tactical defense as defined by the 1993 edition of FM 100-5, OPERATIONS. The term entered US Army doctrine in the 1986 edition of FM 100-5 and was defined as a concept for an attacking force. The 1993 edition now defines culmination equally for the defender. The monograph begins with an investigation of the original concept defined by Carl von Clausewitz, in his book <u>On War</u> . It then explores US Army doctrine along with the changes that have occurred between 1986 and 1993. Three historical case studies of defending units that reached their point of culmination are assessed along with four criteria which assist the examination. The four criteria are the benefits of <i>terrain</i> the defender has over the attacker, the principle of <i>surprise</i> and how it changes hands quickly from the attacker to the defender, the tenet of <i>initiative</i> which is a "balance of equilibrium" constantly shifting in the tide of tactical engagements, and the combat power dynamic of <i>leadership</i> . It is leadership, above all else, that provides the intuitive creative ability to a defending force commander to continue fighting beyond what is now defined as culmination in the defense. This monograph concludes that, in tactics, culmination results in a change or transition from one form of warfare to another. | | | | |
| 14. SUBJECT TERMS TERRAIN DEFENSE LITTLE ROUND TOP CULMINATION LEADERSHIP BATTLE OF IMJIN ATTACK INITIATIVE FIRST BATTLE OF YPRES | | | 15. NUMBER OF PAGES 36 | |
| | | | 16. PRICE CODE | |
| 17. SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED | 18. SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED | 19. SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED | 20. LIMITATION OF ABSTRACT UNLIMITED | |

19941216 104

STANDARD INSTRUCTIONS FOR COMPLETING SF 290

The Report Form (SF 290) is used in announcing and cataloging reports. It is important that this form fill in be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to *stay within the lines* to meet or *stay below the lines* to meet.

Block 1. Agency Use Only (Optional)

Block 2. Report Date. Full publication date including day, month, and year. If available (e.g., 1 Jan 67). If not, date of completion.

Block 3. Page Offsetting and Index Covered. State whether any part of the report, abstract, etc. is applied to contract of other project dates (e.g., 10 Jun 67-30 Jun 67).

Block 4. Abstracted in. A title is taken from the report of the project period for the most meaningful and complete information. When a report is prepared in more than one volume, report the publication title, volume number, and include only the first page of the volume. On classified documents, enter the classification in parenthesis.

Block 5. Project Description. To include contract and grant number, program element number(s), project number(s), task number(s), and other identification(s). Use the following table:

| | |
|----------------------|-----------------|
| C - Contract | 1 - Project |
| E - Grant | 2 - Task |
| EC - Program Element | ET - Task Unit |
| PT - Project | AT - Agency No. |

Block 6. Abstracted in. (Optional) responsible agency or organization performing the research, or the title of the content of the report. If this is not applicable, this should follow the name(s).

Block 7. Performance Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performance Organization Report Number. Enter the organization's internal report number(s) only. Do not include organization performing the work.

Block 9. Source(s) of Report(s) (Agency Name(s) and Address(es)). Self-explanatory.

Block 10. Report Number. Do not include Agency Report Number(s) if known.

Block 11. Special Instructions. Enter information which is not to be considered as: Restricted from general public; To be published; When report is revised, include a statement of the date of the report superseded or replaced; or other special instructions.

Block 12a. Distribution/Availability Statement. Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g., NOFORN, REL, ITAN).

DDP - See DoDD 5230.24, "Distribution Statements on Technical Documents."

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

Block 12b. Distribution Code

DDP - Leave blank.

DOE - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports.

NASA - Leave blank.

NTIS - Leave blank.

Block 13. Abstract. Include a brief (Maximum 200 words) factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code (NTIS only).

Blocks 17.-19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

SCHOOL OF ADVANCED MILITARY STUDIES
MONOGRAPH APPROVAL

Name of Student: Major Michael T. Flynn

Title of Monograph: Climax or Conclusion: Culmination in the Defense.

Approved By:

Robert H. Berlin Monograph Director
Robert H. Berlin, Ph.D.

James R. McDonough Director, School of
Col James R. McDonough, M.S. Advanced Military
Studies

Philip J. Brookes Director, Graduate
Philip J. Brookes, Ph.D. Degree Program

Accepted this 17th day of December 1993.

| | |
|--------------------|--|
| Accession For | |
| NTIS CRA&I | <input checked="checked" type="checkbox"/> |
| DTIC TAB | <input type="checkbox"/> |
| Unannounced | <input type="checkbox"/> |
| Justification | |
| By | |
| Distribution / | |
| Availability Codes | |
| Dist | Avail and/or Special |
| A-1 | |

ABSTRACT

CLIMAX OR CONCLUSION: CULMINATION IN THE DEFENSE. by MAJ Michael T. Flynn, USA, 36 pages.

This monograph examines the definition of the term culmination for the tactical defense as defined by the 1993 edition of FM 100-5, OPERATIONS. The term entered US Army doctrine in the 1986 edition of FM 100-5 and was defined as a concept for an attacking force. The 1993 edition now defines culmination equally for the defender. The monograph begins with an investigation of the original concept defined by Carl von Clausewitz, in his book On War. It then explores US Army doctrine along with the changes that have occurred between 1986 and 1993. Finally, three historical case studies of defending units that reached their point of culmination are assessed.

Terms used in doctrine usually have some grounding either in theory or history or a combination of both. Because the culminating point has only been addressed by one author, Carl von Clausewitz, an examination of several other authors, including Jomini, Svechin, Tukhachevskiy, Mao, and Sun Tzu, is provided. This examination looks at their thoughts on the relationship between attack and defense to determine if culmination in the defense is the same as it is in the offense.

Four criteria are introduced which examine the definition of the term. The first two are the benefits of *terrain* the defender has over the attacker and the principle of *surprise* and how it changes hands quickly from the attacker to the defender. The next two are the tenet of *initiative* which is a "balance of equilibrium" constantly shifting in the tide of tactical engagements, and the combat power dynamic of *leadership*. It is leadership, above all else, that provides the intuitive creative capability to a defending force to continue fighting beyond what is now defined as culmination in the defense.

This monograph concludes that, in tactics, culmination results in a change or transition from one form of warfare to another, i.e., attack to defense and defense to counterattack. However, it is the sensing of a commander, using his intuitive judgement, in combination with every other part of his decision making process, which determines when this transition occurs.

TABLE OF CONTENTS

| Section | Page |
|--|-------------|
| I. Introduction | 1 |
| II. Theoretical Assessment | 6 |
| III. Doctrinal Assessment | 14 |
| IV. Historical Analysis | 19 |
| Battle of Little Round Top - 1863 | 19 |
| First Battle of Ypres - 1914 | 23 |
| Battle of the Imjin - 1951 | 27 |
| V. Analysis | 31 |
| VI. Conclusions | 33 |
| VII. Implications | 35 |

I. INTRODUCTION

The newest edition of Field Manual 100-5, OPERATIONS, dated June, 1993, gives the U.S. Army a vision for the future. Accompanying this vision is continuing discussion in the Army to further challenge its doctrine. Challenging doctrine insures only the highest quality product exists. In the absence of either experience or education, doctrine must provide precision in the definition of common terms. A lack of consensus defining terms can have disastrous effects on the battlefield. It is doctrine, especially FM 100-5, that forms a foundation for the rest of the Army making it capable of fighting and winning this nation's wars.

One of the definitions in the revised FM 100-5 is the term culminating point. The culminating point, a theoretical concept, was addressed by Carl von Clausewitz in his seminal work, On War. He defined it solely in terms of an attacking force. FM 100-5 has now defined it equally for the defender. A review of the term is required to determine if the concept of culminating point means the same for the defending force as it does for the attacking force.

FM 100-5, OPERATIONS, states, "Whatever the immediate purpose, the greater intent of the defense is to force the attack to culminate, to gain the initiative for friendly forces, and to create the opportunity to shift to the offensive."¹ The manual classifies the term culmination as the point in time and location when the attacker's combat power no longer exceeds that of the defender, accepting risk and pushing soldiers beyond that point exposes the attacker to counterattack and possible defeat. Doctrine then defines defensive culmination as the point where the defender no longer has the capability to go on the counteroffensive or defend successfully.² While doctrine stresses "culmination" as one of the key concepts of campaign design, the current definition and examples

provided make it one of the most difficult to accurately describe for the tactical defense.

The US Army recently increased the number of concepts of campaign design in the 1993 edition of FM 100-5 from three to four. While this increase is significant, there is a shared desire among military professionals to determine if concepts such as culmination should be in doctrine. By placing a term in the "keystone" manual, there exists a responsibility for the term to be clearly defined. This allows subordinate doctrinal manuals and their descriptions of these terms to have continuity and understanding throughout the Army. Without clearly defining terms, there may be misinterpretation. In 1986, the culminating point was only defined for the attacking force, while the 1993 edition now also includes the defender as well. Carl von Clausewitz, the originator of the term, defined it as follows:

The Culminating Point of the attack is the point beyond which the scale turns and the reaction follows with a force that is usually much stronger than that of the original attack...it occurs when there is a significant loss of combat power by one side or the other...Often it is entirely a matter of the [commander's] imagination.³

This monograph asks the question does the term culminating point mean the same for the defender as it does for the attacker. It also attempts to determine if the original concept as stated by Clausewitz can be applied equally to both defense and attack. The original theory of the culminating point stated by Clausewitz is analyzed to assess whether or not the term is being used correctly. Evidence presented by other theorists on defense and attack is analyzed to see if they agree with Clausewitz on his concept of culminating point. Since the culminating point's definition has changed between the 1986 and 1993 editions of FM 100-5, it is also necessary to determine if this change was justified. Additionally, three historical

examples are analyzed to determine if a culminating point exists in the tactical defense and whether it means the same thing in all cases.

The historical case studies are analyzed using four criteria: *surprise, terrain, initiative, and leadership*. The first two, surprise and the benefits of terrain, are two of the decisive advantages Clausewitz discusses in his relationship between attack and defense in tactics. The third, initiative, means setting or changing the terms of battle by action and implies an offensive spirit in the conduct of operations. This idea of changing the balance of equilibrium during a battle may be key to defining culmination. Finally, leadership is the critical combat power dynamic that inspires units to achieve superhuman heights. It is intuitive leadership in difficult situations which may provide a clue to a proper definition of culmination. Each of these criteria are further analyzed as they relate to the relationship between attack and defense and to the current definition of the culminating point.

First is the element of surprise and its impact on opposing forces. Surprise is the ability to "strike the enemy at a place or in a manner for which he is unprepared."⁴ Achieving surprise must be accompanied by boldness, and rapidity of execution which leads to overcoming any disadvantages lost to initiative. These factors alone may lead to successful accomplishment of the defense. "Surprise is produced through measures which either deny information to the enemy, or positively deceive him, as to our dispositions, movements, and plans."⁵

At the tactical level, surprise, in many cases, is in equilibrium for both the attacker and defender. The attacker usually needs some measure of surprise to overcome the disadvantages of terrain and the accrual of time the defender enjoys. Otherwise, if the attacking force loses the advantage gained by surprise, he quickly finds himself in a battle of attrition vice maneuver; one which the defender will more than likely win. The defender, due to his positional advantage, should make surprise a continuous part of his defense. He should plan counter-attacks along his line at times or places of his choosing,

and he should plan to use the advantage of interior lines to rapidly maneuver within his defense to quickly out-tempo the attacker. Surprise then becomes relative to the user. Once surprise is lost, the side that has possession of the best terrain usually has an advantage.

The second criteria is terrain. If used properly, terrain can provide a much smaller force with exponential advantages over a much larger force. The benefits of terrain provide the defender with a concealed position virtually invisible to his opponent until the decisive moment arrives.⁶ There are two critical factors for a unit or commander to consider to gain the advantages offered by terrain. First, having the time available to prepare the position, and second, properly selecting the best defensible terrain. Clausewitz suggests that the defender may always have the benefit of terrain, which generally ensures its natural superiority.⁷ The defender, when choosing his terrain, decides where to position his forces to best kill the enemy. Therefore, the benefits of terrain may exercise a decisive influence on the outcome of defense. The defending force then fully exploits these benefits and waits and acts accordingly. The key effect of terrain is to initially overcome the element of surprise and regain the initiative lost by the attacker in the crucial early moments of battle.

The third criteria of initiative is a dynamic that sets conditions on the battlefield with offensive action. Like surprise it will teeter between the attacker and the defender. It may seem like a fleeting dynamic to the force that does not understand or apply its power. By setting conditions and changing the terms of battle, initiative may play a vital role in defining culminating point. A shift in initiative may determine when the attacker and the defender reverse their roles on the battlefield. The defending force commander must be ever vigilant to maintain initiative over the attacker. This constant effort forces the attacking commander to do the defender's will, to fight within his operational tempo, and allows him to retain freedom of action. Initiative means denying the enemy options he may otherwise have had. It requires leaders to be extremely proactive acting faster

than the enemy. Taking the initiative is a key element for any commander. It is his intuitive ability combining all the dynamics of combat power which allow him to act independently to achieve success.

According to FM 100-5, "In the defense, initiative implies quickly turning the tables on the attacker,...Once the attacker commits to a particular course of action [one the defender is aware of], defenders frustrate it and then preempt any adjustments by the attacker, thereupon seizing the initiative."⁸ Hence, initiative inherently suggests acting. The two forms of resistance in the defense discussed by Clausewitz are waiting and acting. The defender must *act* to seize the initiative away from the enemy [emphasis added]. Mikail Tukhachevski, a former Russian military officer, in his three volume work, New Problems in Warfare states, "Initiative, [is] an enterprising attitude, [which becomes]...the manifestation of independent actions and heroism by the smallest troop elements, especially in a prolonged [battle]."⁹

Finally, culmination, as currently defined, occurs when there is a significant "loss of combat power" by one side or the other. The dynamics of combat power are defined by four terms: maneuver, firepower, protection, and leadership. Leadership, the fourth criteria, is the most critical of all the dynamics of combat power. Leaders integrate the other three dynamics in a variety of combinations to create conditions for success.

The leadership dynamic includes "competent and confident officer and noncommissioned officer leadership."¹⁰ It is leaders, above all else, who must demonstrate the physical, moral, and spiritual strength to bring their units across the threshold of defeat. Even though units are soundly outnumbered and on the verge of collapse; courageous, disciplined, inspired leaders may still lead their unit to a decisive victory. It is this quality and intuition of leaders that determines the loss of combat power in a unit. The leader makes this determination and then decides whether or not his unit can still accomplish their mission.

The attacker by virtue of attacking usually expends more combat power than the defender. Therefore, the attacker, in a sense, is driving to his culminating point faster than the defender. This assumption depends on the application of combat power by both sides. If one side or the other exhausts his combat power faster than his adversary, then culmination may come sooner. The attacker, however, will not usually have the luxury of time or the advantage of terrain to husband his resources. Therefore, the leadership dynamic may be key to defining culmination in the defense.

The monograph now examines several well known theorists analyzing their thoughts on the term culminating point. In theory, the term culminating point was only addressed by one author, Carl von Clausewitz, in his book On War. However, all the theorists have addressed a relationship between attack and defense, which is essential to defining when a culminating point occurs. During analysis their contributions are examined to determine if the concept of culminating point was fully developed as Clausewitz meant it to be. It also examines if there are differences in the application of the term for either an attacker or a defender. Finally, an assessment is provided of the culminating point's merit as currently defined in FM 100-5, OPERATIONS.

II. THEORETICAL ASSESSMENT

The theoretical concept of culminating point was only defined by Clausewitz. It is difficult then to extract from other theorists their views of the term. However, many theorists have written about attack and defense and the relationship between these forms of warfare. This section examines their thoughts on this relationship and identifies the main elements they agree on. Essentially, they all concur that the attacker must continuously act while the defender has the initial advantage of waiting. However, sooner or later the defender must act.

The concept of culmination implies the inability to either continue acting or continuing to wait, therefore having to act. The word culminate means to reach or cease at the highest point of power or to finish or end. It means to come to a concluding point or for a force or body to reach its highest altitude as a celestial body would. Culminate means to bring to a climax or conclusion, whereas culmination means the process of reaching a summit or an acme.¹¹

Carl von Clausewitz, in On War describes the culminating point in Book Six, The Defense and in Book Seven, The Attack. While the term seems clearly enough defined in Book Seven, Clausewitz fails to return to the concept for clarification when it relates to the defense. Peter Paret, in his essay, Clausewitz in the book Makers of Modern Strategy, discusses this aspect of Clausewitz. Paret states, Clausewitz wrote "with extreme, one sided clarity, to be varied, sometimes chapters later, and given a new dimension as it blends with other propositions and observations."¹² There is however, one exception; the culminating point of victory. Clausewitz writes about how the defender and attacker need to think about the point of culmination. In the defense, Clausewitz writes:

"So long as the defender's strength increases everyday while the attacker's diminishes, the absence of a decision is in the former's best interest; but if only because the effects of the general losses to which the defender has continually exposed himself are finally catching up with him, the *point of culmination* [my italics] will necessarily be reached when the defender must make up his mind and act, when the advantages of waiting have been completely exhausted...There is of course no infallible means of telling when that point has come; a great many conditions and circumstances may determine it."¹³

Clausewitz then states "that waiting and acting...are both essential parts of a defense."¹⁴ They are not two distinct, separate phases of battle. Waiting is the main feature of the defense and is interwoven throughout the whole of it. Acting is the positive element of resistance, that element which gives the defense its more or less offensive attitude. Without the act of waiting the defense would no longer be a defense, without acting the

defense would no longer be war. The idea of retaliation therefore in the defense is absolutely fundamental.¹⁵

Another interpretation of Clausewitz comes from Michael Howard, a distinguished historian, in his book, Clausewitz. Howard states, "An army [takes] up defensive positions in order to *fight* from them."¹⁶ The defender selects these fighting positions not to hide as an amorphous mass in a hole, but in order to maximize its fighting effectiveness. Essentially, the defender must fire back for his survival. Eventually, the balance of advantage tips, when the attacker reaches a low point and the defender amasses strength. This point is the culminating point. The skill of the professional soldier is identifying when this moment will come.¹⁷

Roger Ashley Leonard writes in his book, A Guide to Clausewitz On War, that the culminating point for the defender may be reached at a later point in the battle than for the attacker. To do this the defender must "buy up prospective advantages" to be used later in some negotiation. There will be a culminating point in the attack and the defense. The attack, for reasons such as protecting extended lines of communications, will reach it and stop and defend or continue and risk defeat. The defender must consider all the elements of the equation in the battle beforehand. Having done this, the defender using some "fine tact of judgement" discovers when he will reach his culminating point and counterattacks.¹⁸

Leonard also writes, "The offensive side can only have the advantage of one complete surprise of the whole mass with the whole, [while] the defensive is in a condition to surprise incessantly, throughout the whole course of the combat, by the force and form he gives to his partial attacks."¹⁹ This speaks to two key concepts. First, he suggests that the principle of surprise is an advantage only once for the attacker while the defender can impact on it throughout his defense. Next, when he uses words like "incessantly" and phrases like "partial attacks," he implies that the defender continuously acts during his defense forcing the attacker to his culminating point.

In tactics, the defending force commander only defends because relative combat power is no longer to his advantage. Therefore time (the act of waiting), is what the defender seeks. If the defender can withdraw, he will do so to attempt to gain more time. Eventually, the attacking force commander will continue to lose relative strength the further he extends his supply lines and leaves combat forces along his routes for force protection in the rear. Each loss of relative strength by the attacker combined with the advantage of waiting for the defender increases the defender's strength. In order for the defender to avoid complete annihilation at the outset he must incorporate the positive aspect of resistance. This is done either through local counterattacks, overwhelming firepower (which is usually not available) or to conduct a large scale counterattack, as Clausewitz says, "to parry the blow" of the attacker.

Bernard Brodie, in "A Guide to the Reading of On War," satisfies the reader with the first solid definition of the term culminating point. He defines it by stating, "unless an offensive results in the defender's complete collapse, there will be a "culminating point" at which [time] the attacker is about to lose effective superiority. To push beyond this point without a good chance of an imminent favorable decision is dangerous."²⁰ Clausewitz, in discussing the culminating point of victory, states, "...one must know the point to which [war] can be carried in order not to overshoot the target; otherwise, instead of gaining new advantages, one will disgrace oneself."²¹ He explains the "threshold of equilibrium" as that point which upon crossing sends the force into a realm of uncertainty. Although the commander has thought out his actions beforehand, once the wheels of motion begin turning, many reasons which would otherwise seem valid to cause the force to stop will no longer deflect or arrest the momentum.²²

There are great difficulties when trying to stop a force's momentum. It would be like people entering an elevator door only to realize the elevator is gone and there is nothing but ten floors between them and the bottom. If their momentum is not checked and causes them to cross that threshold, they will certainly perish. Clausewitz's description

leads one to think that the application of the culminating point may bring commanders to premature decisions on the battlefield. They may stop attacking or defending because they imagine their forces to be reaching a culmination.

While Clausewitz is the only theorist who specifically discusses the term culminating point, other theorists address it through their views on attack and defense. The question remains to determine if the concept has the same meaning for the attacker as it does for the defender. For instance, Mao Tse-Tung states, "Active defense is also known as offensive defense, or defense through decisive engagements. Passive defense is also known as purely defensive defense or pure defense. Passive defense is actually a spurious kind of defense, and the only real defense is active defense, defense for the purpose of counterattacking and taking the offensive."²³

There is a strongly held belief by Mao that only a "complete fool" would cherish passive defense. This points out Mao's understanding of defense as having an active or positive form. Regardless of the state of the enemy, if the decision is to defend it should include measures to go on the offensive. Mao quotes Sun Tzu that, "Avoid the enemy when he is full of vigor, strike when he is fatigued and withdraws."²⁴ While this may not always be possible to do, the defender must allow the enemy to expend his vigor by adeptly using the advantages of terrain and by seizing the initiative at a time of his choosing. This decisive act may be the commander's intuitive sensing of the situation or it may be a desperate act with no other recourse available.

The ancient warrior Sun Tzu does not mention culmination as a concept. However, his writings seem to agree with Clausewitz and Mao that defense is only a defense if one plans active measures. In his essays on The Art of War, he explains a concept of opposites known as the ch'i and the cheng. The ch'i is the extraordinary force while the cheng is the normal force. In the defense, the cheng would be the static defensive position holding a piece of terrain, fixing the enemy, while the ch'i would be the counterattacking force, hiding and waiting for the right moment to strike out against the

attacker's flanks to complete his destruction. The cheng is the negative (passive) form of the defense, although extremely vital, while the ch'i is the positive (active) form.²⁵ Sun Tzu states, "Invincibility lies in the defense; the possibility of victory in the attack."²⁶ This comment seems to be in complete agreement with Clausewitz's belief that defense is the stronger form of war, and that the counterattack during the defense may be the more decisive.

Baron Antoine Jomini, a Napoleonic era theorist, influential in his own right with U.S. Army doctrine, with his concepts of decisive points and lines of operations, writes in The Art of War, "For a single operation...the offensive is almost always advantageous,"²⁷ particularly in regards to taking the initiative. However, "a defensive war is not without its advantages, when wisely conducted."²⁸ Just as Mao treats the idea of passive defense being a useless form, without gaining any real benefit in war, Jomini says it is the active form of defense which may accomplish great successes. The defender, by using the active form of warfare, namely the counterattack in his plans, combines the advantages of both systems. He awaits the attacker upon prepared positions, all resources within hand, surrounded by the advantages of being on his own ground, can steal the initiative with hope of success.²⁹

The concept of culminating point is not specifically addressed by Jomini. However, in his discussion on defensive battles he outlines six specific rules to be "generally observed" when selecting positions to defend from. Each deals mainly with some aspect of terrain and its effect on maneuver, firepower, or communications. He then concludes that while all this is fine for the thought process, "the best thing for an army on the defensive is to know *how* to take the offensive at a proper time, and to *take*[my italics] it."³⁰

Major Michael Esper, a US Army infantry officer in his monograph on Defensive Culmination, states "that [the] proper time could be aptly labeled the culminating point in the defense."³¹ This appears to be in complete agreement with Clausewitz who said the

art of defense is knowing *how* long to wait, and knowing *when* to act. A statement that Jomini makes gets directly to the idea of intuition and imagination of the commander when he says, "One of the greatest talents of a [commander] is to know how to use these two systems [offensive and defensive], perhaps alternately, and particularly to be able to take the initiative during the progress of a defensive war."³²

The idea of intuition and imagination are leadership traits that directly influence the outcome of a successful defense. If the leader can sense the attacker's plan, and can conserve combat power during his defense, he may eventually be able to strike out on the attack. He will have taken the initiative away from the attacker and placed it squarely in his own hands. Leadership and initiative are two fundamental elements of knowing when to shift from defense to offense. This shift may well be the culminating point in the defense.

Aleksandra Svechin, a Russian military theorist and Front-level commander during World War I, in his book, Strategy, wrote;

"in the first stage, defense has the possibility of using the lines and depths of the [battlefield], which compels the attacking side to expend forces and time to fortify an expanse and to pass through it; and gaining any amount of time is a new plus for the defense. The defense reaps where it sows, since the offensive often is stopped by false reconnaissance data, false fears and inertness."³³

This discussion is in agreement with Clausewitz when he says, "The real reason [the defender is successful without having to fight] is the faintedness of the attacker's determination, which makes him hesitate and fear to move."³⁴

However, Svechin considered Clausewitz's Sixth Book on Defense as an experiment requiring revision. He notes what Clausewitz termed the twin aspects of defense, awaiting and action in a slightly different form. He replaced action, i.e., timely offensive action by the defender, with counter-blow.³⁵ "The idea," Svechin says, "of retribution as the means of an answering blow lies at the basis of every defense; the way of waiting--

this is the road of a more secure victory over the enemy, but only the answering blow establishes equality in the dynamic of offense and defense."³⁶

Mikhail Tukhachevskiy, in New Problems in Warfare emphasizes a dominant theme of the relationship of attack to defense that each of the theorists wrote about when he states, "defense without maneuver is impossible."³⁷ His suggestion is that defense is not defense unless there is some active measure, i.e., counterattacks. These theorists all agree a continuum exists in the defense which goes through a metamorphosis during its stand. These changes are explained in the terms waiting and acting. While the defender has the advantages of both forms of resistance, the attacker only has the element of acting to base his success on. The combination of the other elements, especially time, inherent in the two forms of war legitimize the claim Clausewitz made that the defense was the stronger form. Tukhachevskiy states that initiative and independent actions, especially in a prolonged battle (again the time factor) will always be to the defender's advantage.³⁸ Further, he states, as technology improves, the strength of the defender in a modern war increases continuously; there is a greater quantity and better quality of weapon systems and all this is directed against the advancing enemy.³⁹

The theoretical explanation for the term culminating point is not at all clear. While the different theorists generally agree that defense is the stronger form of war and it consists of active measures to be successful, only one theorist, Clausewitz, actually states the term and attempts to define it. However, if doctrine is derived from some broad strategy which begets some operational concept, it is essential that terms evolving from theory be clearly understood by everyone in the Army, especially by those charged with executing doctrine. If doctrine is a guide to action, it cannot be pure theory; it must be an accumulation of digested theories with an explanation of the concepts they present.

Clausewitz only touched on the concept of the culminating point. As Paret wrote, Clausewitz had a tendency to state some concepts in the earlier chapters of his book, only to later add a new dimension to them.⁴⁰ This can lead to misinterpretation and

confusion, especially when the other theorists do not mention culminating point or culmination at all. In fact, Svechin believed Clausewitz's Sixth Book on Defense, where culmination is first mentioned, required revision. He held that Clausewitz needed to place more emphasis on what Svechin called the "counterblow," the idea of retribution in the defense.⁴¹ Jomini emphatically tells us to know how and when to counterattack by choosing the proper timing of it. This idea of retribution and the timing of it implies that culmination in the defense may be the counterattack. While the general agreement among the theorists appears to be that defense is the stronger form of war, they all state that defense is not a defense unless there are some positive actions planned throughout it. There is a caution here. If the Army integrates theoretical concepts into doctrine and maintains that doctrine must meet the test of relevancy, achievability, acceptability, and adaptability, then doctrine must be understood. Understood, not by the few who study and write doctrine, but at least by a majority of staff officers and commanders in the Army.

III. DOCTRINAL ASSESSMENT

"As the Army's keystone doctrine, FM 100-5 describes how the Army thinks about the conduct of operations."⁴² Part of this thought process is a shared desire among military professionals to determine if concepts placed in this manual are understood throughout the Army and have a valid application to military operations. The recent edition of FM 100-5 has increased the number of concepts of campaign design, one of which is the culminating point, from three to four. While this increase is significant and demonstrates a greater level of importance given to these concepts, the evolved definition of the term culminating point may lead to some misinterpretation. In 1986, the culminating point was only defined for the attacking force, while the 1993 edition now includes the defender as well. Thus, a redefinition may be useful. This section addresses how the term has come into existence in US Army doctrine and evaluates past and present definitions.

The 1986 edition of FM 100-5 explained "how Army forces plan and conduct campaigns, major operations, battles, and engagements in conjunction with other services and allied forces."⁴³ This edition reaffirmed the "doctrinal thrust" introduced by the AirLand Battle concept in 1982. During the period 1982 to 1986 there was a significant increase in the U.S. defense budget. This growth in defense spending reflects "a stronger recognition of the possibility of worldwide commitment of Army forces combined with a sharpened appreciation of operational depth and maneuver to formulate a more fluid doctrine."⁴⁴ This also gave greater impetus to the operational level of war, particularly in the areas of computer simulation for wargaming, more focus on REFORGER type exercises in Europe, and increased tempo and training at the National Training Center in California. With this greater emphasis on the operational level of war came the "recognition of the need to fight deep...which emphasized operational art."⁴⁵

Operational art has many theoretical concepts that have developed into U.S. doctrine. In 1986, three key concepts of operational design were first introduced. They are, center of gravity, lines of operations, and culminating point. Without exception, these were quite new terms to many in the the Army community. As the 1986 manual stated, "they [the terms] have not been dealt with in doctrinal literature...and their terminology may therefore be unfamiliar to many American soldiers."⁴⁶ This statement is understandable in itself, however, doctrine should provide the clarity or precise direction for the user. The manual then states, "Readers desiring additional elaboration should consult the extensive published literature on classical and contemporary operational theory."⁴⁷ These statements leave the reader with neither a clear understanding of the terminology nor clear directions for expanded research.

In the 1986 edition the term culminating point was only defined for the attacking force. It was first presented in the opening paragraphs of Chapter Seven, Conducting Offensive Operations. The manual stated:

"The key to success in an offensive campaign is to defeat the enemy before the offensive reaches what Clausewitz called its "culminating point." This culminating point is achieved when a force on the offensive expends so much of its strength that it ceases to hold a significant advantage over the enemy. At that point the attacker either halts to avoid operating at a disadvantage or goes on and risks becoming weaker than the defender."⁴⁸

In Appendix B, where the culminating point is presented formally, it is defined as a point where the strength of the attacker no longer exceeds that of the defender. If the attacker goes beyond this juncture he risks overextension, counterattack, and defeat.⁴⁹

Clausewitz, discussing attacks, states, Most of them lead to a point where their remaining strength is just enough to maintain a defense. It is at that instant the "scale turns" and a reaction follows with a force usually much stronger than the original attack. This is what he means by the culminating point.⁵⁰

The 1986 field manual stresses that tactical attacks can reach culminating points for a variety of reasons. Usually the attacker loses momentum because of heavy resistance, loss of supply and ammunition, troops become physically exhausted, or when reserves are not available. The defender enhances these conditions by conducting counterattacks with fresh troops at selected and appropriate times. The manual then states, "it should be clear that culminating points are equally important to the attacker and the defender...the defender must seek to bring the enemy attack to or past its culminating point before [the enemy]...reaches an operationally decisive objective."⁵¹ The defender must determine when the enemy has become overextended and be prepared to pass over to the counterattack.

The perception one gets is that culmination is essentially a turning point in the battle. For the attacker, this transition occurs when his attack can no longer continue, therefore he stops and defends. At that moment, the attacker reaches his culminating point and shifts from a positive phase to a negative phase. For his part, the defender's culminating point surfaces when he transitions from the passive into the active and counterattacks to complete the destruction of the enemy force. A defender attempts to "defer a decision"

until the advantage turns to him. "This means that defending commanders must accurately sense the attacker's culminating point."⁵² The defender should then hasten the attacker's arrival at his culminating point through either a series of defensive battles (the notion of continuous counterattack by fire or maneuver) or a single defensive battle. Then the defender can turn his forces to the counteroffensive.⁵³

In FM 100-5, 1993 edition, the term culmination is placed under concepts of theater and operational design in Chapter Six, Planning and Executing Operations. By placing culmination early in the keystone manual the Army is compelled to use it as one of the fundamental concepts of operational planning. However, during the evolution of the manual from 1986 to 1993, the term has been redefined, specifically for the defender. The 1993 edition states, "a defender reaches culmination when he no longer has the capability to go on the counteroffensive or defend successfully."⁵⁴ The term is also no longer identified as "culminating point" as the originator, Clausewitz, described it. The newest version of FM 100-5 uses the word "culmination." Doctrinal terms based on single-source theoretical concepts require further assessment and clarification for the reader. Culmination is a valid concept. Due to its increased importance, there may be a need to further explain the concept.

The lack of clarity for this term is highlighted by the use of examples in the section that describes culmination. There are six examples, two strategic and four operational. Each of the examples are of offensive operations; there are no examples of a defending force reaching a culmination. The manual essentially defines culmination equally for both the attacker and defender without presenting a clear picture to the reader by way of examples.

A challenge to the examples presented in FM 100-5 comes from Bernard Brodie in A Guide to the Reading of On War. Currently, FM 100-5 uses Patton's rapid advance across France which got bogged down for lack of supplies as one of the examples of a force reaching culmination. Brodie writes, "Eisenhower played it safe and paid a price for

doing so, but the price was an insurance against catastrophe. He refused to outrun his "culminating point of victory," and stopped to prepare the base for a new offensive [and not to defend] which did in fact end the war."⁵⁵ This is more an example of an operational pause and not one of a unit reaching its culmination.

Eisenhower actually "elected to proceed with a broad-front advance"⁵⁶ with Field Marshall Montgomery, commander of the 21st Army Group, as the main effort in the north and General Omar Bradley's 12th Army Group as the supporting effort in the south. Patton's Third Army, subordinate to 12th Army Group, actually achieved his objectives which were simply to act as a minor thrust in the south and protect the flank of the larger forces. Due to Patton's inflated ego and a sympathetic Bradley, Patton persuaded Bradley to allow his Third Army to thrust toward Metz which would present Eisenhower with a *fait accompli* which he could not ignore. Had Eisenhower allowed Patton to continue further toward the Rhine, the Third Army would have done so with its flanks unprotected.⁵⁷ This would have eventually extended Patton's forces beyond their culminating point.

Clearly Eisenhower paused Patton before he reached this point. Therefore, using Patton as an example of a force reaching its culminating point may not be a valid example. Examples are important. They help explain and clarify terms and phrases in doctrine. The examples presented in the 1993 edition, while not as numerous, are the same ones found in the 1986 edition. Although the definition changed, the examples did not.

The Fundamentals of the Defense chapter in FM 100-5, 1993 confuses the concept further. It states, "Whatever the immediate purpose, the greater intent of the defense is to force the attack to culminate, to gain the initiative for friendly forces, and to create the opportunity to shift to the offensive."⁵⁸ From a Jominian approach, the phrase "creating the opportunity" is similar to his concept of the "proper time." It implies that at this point the defending commander causes the attacker to reach his culmination and now uses his

judgement to decide when to counterattack. The above definition seems to stress that the attacker's culminating point occurs when he stops and the defender's occurs when he attacks.

FM 100-5, Operations "undergirds all the Army's doctrine,...training,...leader development, and soldier concerns."⁵⁹ It provides a vision to take us into the future. New and updated terms used across the spectrum of operations will always require further assessment. While the terms culmination or culminating point may be valid concepts for the operational level of war, it requires greater study and understanding at the tactical level.

The monograph next examines three historical case studies of tactical units during the American Civil War, World War I, and the Korean War. It investigates these units to determine what conditions led them to their point of culmination. The examination assesses if a common theme runs through their defenses. It presents each unit reaching a point of culmination and determines, using the criteria, if it results in an active response or a failure to act. The results of each defense assists in determining the appropriate definition of the term culmination at the tactical level of warfare.

IV. HISTORICAL ANALYSIS

Gettysburg, July 2, 1863

The Battle of Gettysburg was one of the most decisive battles fought during the American Civil War. It took place 30 June through 3 July, 1863. Both the Union and Confederate Armies merged unknowingly toward the town of Gettysburg, Pennsylvania. The Confederate Army of seventy thousand men was led by General Robert E. Lee. The Union Army of the Potomac of eighty thousand was led this time by General George Meade. Lee and Meade, in command of their forces, were on their way into a battle which changed the course of the entire war. One of the most significant engagements of the Battle of Gettysburg occurred on a rocky hill known as Little Round Top. Here stood

the Twentieth Maine Regiment, volunteers who already experienced hardship earlier during the Battle of Fredricksburg.

Colonel Joshua Chamberlain, commander of the Twentieth Regiment, described the terrain of Little Round Top as "rough and rocky with hardly any woods."⁶⁰ He further stated that his "line faced generally toward a more conspicuous eminence [to the] southwest..., which is known as Sugar Loaf, or Round Top."⁶¹ On the whole his position dominated the ground to his west and northwest looking directly into the Confederate lines facing his force. The approximate observation provided was slightly over one half mile looking southwest along a creek known as Plum Run. To his northwest ran the Union line through a wheat field about 200 yards away and extended up to a junction between a peach orchard and the Emmitsburg Road. A piece of terrain Chamberlain decided to control was a smooth, thinly wooded hollow set between the two crests of Round Top and Little Round Top.⁶² This hollow, although only slightly wooded, provided good cover and concealment.

Colonel Strong Vincent, Chamberlain's Brigade Commander, "indicated [to Chamberlain] ...that a desperate attack was expected in order to turn [their] position."⁶³ He then told Chamberlain that his mission was to defend from this extreme left flank of the Union Army and hold that ground at all costs regardless of the situation. Upon receiving this order, Chamberlain proceeded to occupy the terrain around Little Round Top. From his vantage point the Union lines could be seen for a mile or more, and the rebel lines for three miles.⁶⁴ Chamberlain then positioned his soldiers along the hill to the northwest tying into the 83rd Pennsylvania on his right. No one was on his left. The Twentieth Maine was the extreme left flank of the Army of the Potomac.

While his subordinate commanders positioned their soldiers, Chamberlain conducted a leader's reconnaissance out to the front of his unit's position. He looked at it as the enemy might see it. He observed the dominate terrain of Round Top to his southwest and felt uneasy, especially if the enemy were able to position an artillery battery upon it.

After forming his line, he quickly detached Company B to extend across the wooded hollow to his south as a line of skirmishers to act as a type of flank security, to prevent a surprise on the unit's exposed flank and rear.⁶⁵ Chamberlain was uncertain about dispatching these men to such an isolated position, but he knew their mission was a critical one. After he finished positioning his unit, he looked over the terrain again, and felt that this might be a good place to fight. Given the dominance of its position over the small valley to its west and southwest and the natural cover provided by the rocks and trees in the area, he chose to place the remainder of his companies along the forward slope of Little Round Top. Another reason he chose to bring his forces off the crest of the hill was that the Confederates liked to fire artillery high and the rocks along the lower slope provided more cover for his soldiers. The soldiers then proceeded to dig in and build a stone wall out of the available rocks around their position.

Before Chamberlain's position was hardly complete the Twentieth Maine was under attack. Brevet Major Rittenhouse, a member of the Fifth Corps, of which Twentieth Maine was a subordinate unit, reported later that the Confederate forces had assaulted the center of Vincent's brigade to the right and gradually extended along their entire front. He states, "Vincent's brigade...was sorely pressed by part of [General] Hood's division,...but each time they were repulsed with heavy losses."⁶⁶ The confederates determination however continued, this time solely against the Maine Regiment. In this moment of uncertainty, with "his men grabbing the hot barrels of their muskets and preparing to use the butts as clubs, [Chamberlain] saw the futility of it all."⁶⁷ Immediately he extended his line to the left "occupying about twice the extent of [an] ordinary front, some of the companies being brought into single rank when the nature of the ground gave sufficient strength or shelter."⁶⁸ When it seemed as though Little Round Top would be lost, "Chamberlain, with scarcely a round of ammunition left, had the audacity to order a [fixed bayonet] charge on this greatly superior force."⁶⁹ His counterattack took roughly five-hundred prisoners and almost twice as many weapons.

However, it was the element of surprise and shocking effect of a bayonet charge that had the greatest impact on the Rebel forces left to fight.

This action by Chamberlain clearly demonstrates decisive leadership acting in the heat of battle. Maneuvering his regiment along the best defensible terrain took away any element of surprise the enemy might have gained by attempting to outflank Chamberlain's men. It also demonstrates a recapturing of the initiative by the defending force. While Chamberlain did not go on the offensive, in this instance he shifted the terms of battle by denying the confederates the opportunity to outflank the Union line. Without giving the enemy any advantage by his maneuver, the Twentieth Maine's counterattack was so "effective that [the enemy] soon fell back among the rocks and low trees in the valley."⁷⁰

The engagement on Little Round Top greatly assisted the Union's decisive victory over the Confederate forces at the Battle of Gettysburg. One of the greatest compliments paid to the men of the Twentieth Regiment and Colonel Chamberlain came from Colonel Oates, commander of the 15th Alabama, who fought against the Maine Regiment that day. He said, "[Chamberlain's] skill and persistency and the great bravery of his men saved Little Round Top and the Army of the Potomac from defeat. Great events sometimes turn on comparatively small affairs."⁷¹

Chamberlain snatched defeat from the jaws of the Confederate forces on 2 July, 1863. He saw the culmination of his defense coming to its climax. His physical combat power no longer exceeded that of his enemy. He understood the moral effects this devastating fight was having on his men and the desperate situation they were in had he done nothing. Unsure of what effects fixing bayonets and charging might have, it was his last resort to achieve success. In the end, he managed to defend until almost the last possible bullet was expended. He may also have sensed the enemy forces reduction in strength as well. With all of this, it was Chamberlain's intuition which told him to fix bayonets and counterattack at this critical moment.

Using the combat power dynamic of leadership, Chamberlain was able to effectively captured the initiative at a decisive moment in the battle by conducting a surprise counterattack against the enemy. The terrain of Little Round Top allowed him every advantage over the enemy to maneuver against the forces to his front. After his counterattack, he quickly repositioned his forces again along the rockiness of Little Round Top further protecting his force. Chamberlain held to the last as he was ordered to do.

First Battle of Ypres 22 to 23 October, 1914

In Mid-October, 1914, some of the worst fighting of World War I took place around a small town called Ypres. Since the fall of the Belgium fortress at Antwerp in early October much had been accomplished by the Germans to continue their preparations for a thrust to secure Calais on the French coast.⁷² This thrust sent the German Fourth Army against a combination of the British Expeditionary Forces, Belgian Regulars, and French Territorials. What came to be known as the Race to the Sea was an all-out offensive by the Germans seizing bridges across the River Yser enabling the Fourth German Army to move to secure Calais, their ultimate objective. The decisive battle which denied the Germans their objectives was called The First Battle of Ypres. The opposing forces became locked in a contest to destroy each others northern most flank and will to fight.

By 19 October, the Allied forces in the west still lacked arrangements for any type of unity of command. However, under General Ferdinand Foch, Commander, Group of Armies of the North, there was a considerable reduction of friction. Also, considering the differences in training, war materials, and language, these forces managed to fight side by side, and at times as one Army. Opposing the Allies in the east was the well trained German army. They were attempting to outflank the northern most units of the Allied forces. To do this, the Germans fed in extensive reinforcements. The First Battle of Ypres essentially became a contest of wills between two great forces. It lasted less

than two months, but left a grim pale over both belligerents for the remainder of the war. The end result pitted 263 Allied battalions against 426 German battalions.⁷³

The town of Ypres in 1914 was surrounded by strong earthen ramparts faced with brick. Along its eastern and southern sides existed a broad wet ditch. Ypres stands at the junction of the coastal plain where the Comines and Yser Canals meet. It is overlooked on the south by the Kemmel Heights and on the east by a low line of hills running southwest to northeast.⁷⁴ This ridge line was often referred to as the rim of a saucer with Ypres in the middle. Possession of the ridge provided a marked advantage to the holder. It allowed for screening of movements, enfilading of fires, and observation of the surrounding area. There were also a series of forests to the north and south that provided excellent cover and concealment. "Nearly all [the forests] contained...considerable undergrowth."⁷⁵ For example, The Houthulst Forest to the north, which eventually fell into German hands became a "veritable fortress."

The terrain offered more advantages to the defender than to the attacker. The only disadvantage of the terrain would be if the Germans got a foothold along the ridge. This would give them virtually perfect observation overlooking the town of Ypres. This type of observation would afford the Germans knowledge of forces moving in and out of Ypres, re-supply units moving along the key roads entering the town, and it would allow observed fires to be directed against Allied positions.

After several days of fighting and some reorganization, there were about seven British divisions and five Allied cavalry divisions remaining. They were defending a front approximately thirty-six miles wide against eleven German divisions, eight of which were fresh, and eight cavalry divisions. The nature of the fighting had been severe and it was now determined by Allied High Command that the Germans were conducting an all-out offensive. Owing to any further difficulties, the Allied commander, General Joffre during the night of the 21st of October, issued an order from G.H.Q. stating, "action against enemy will be continued tomorrow,...[all units]...will be strongly entrenched."⁷⁶

However, their defensive preparations were lacking because of reduced manpower and material.

The established defensive positions around Ypres were short disconnected lengths of trenches, hastily constructed during the few hours the troops had on the ground. There were also no second line defenses. The German attacks appeared to the British to be concentrating on particular portions of their line, but it was not yet "known that they were attempting to break through on the whole Ypres front."⁷⁷ While the British forces actually had a disjointed defense, the German reports stated that "[the British] had dug a well-planned maze of trenches behind broad wire entanglements."⁷⁸ This error in reporting by the Germans was probably the result of high standards of marksmanship, methods of concealment being used, and other active measures taken by the British forces.

Throughout the next 24 hours intense fighting took place. On the German side there were a series of attacks attempting a breakthrough along the Allied line to secure key high ground overlooking Ypres. On the Allied side, they counterattacked to stop penetrations of their line or destruction of one of their units. The initiative early on was with the attacker, however, the Allies had "intercepted [an] enemy order...directing a vigorous attack [south of their]... position."⁷⁹ This immediately shifted the tactical initiative to the defender. Now the Allies could concentrate forces in this location and focus on defeating the Germans and stopping their attacks.

By the end of the 22nd of October, the situation remained unchanged. However, a Brigadier General Bulfin, a British brigade commander, was given orders to counterattack to recapture an area known as Kortekeer Cabaret at dawn on the 23d of October. The Germans had earlier captured this area and created a significant gap in the British defense. During the next few hours General Bulfin began "preparing deliberately but methodically a counter-attack...with two battalions."⁸⁰ His units reached their point

of assault, killed and captured numerous enemy soldiers, achieved surprise and was a tremendous success.⁸¹

This element of achieving tactical surprise is essential in a well planned defensive operation. To gain an advantage on the enemy, the defender must not allow the enemy attacker the element of surprise. By using interior lines throughout the defense, the defender can reposition forces to continuously surprise the attacker. The surprise achieved by General Bulfin caused such an impact on the Germans that "during the remainder of the day [and] the night following...[only] a few German patrols appeared,...[but] it was evident that the enemy was uncertain what [had] happened."⁸²

The essential element for reaching culmination as currently defined is a greater loss of combat power of one unit over another. During the Battle of Ypres, the Germans had the combat power advantage in terms of raw manpower. However, the Allied success was achieved because of proper selection and use of good defensible terrain. They also executed an aggressive defense by continuously counterattacking. Eventually, leading up to a major counter-thrust against the Germans which shifted the initiative to the Allies. The surprise achieved by the British alarmed the enemy and made them realize their fight would not be an easy one. It was not numerical superiority that made the difference, it was tactical skill and determined leadership by men like General Bulfin. His successful counterattack against an enemy with greater manpower than his own rendered 490 Germans killed while only losing 47 of his own. He combined leadership skills with the advantages of the terrain and seized the initiative away from the Germans.

The defense occupying the terrain around the Ypres "rim" held. While the fighting in and around this area continued for another few weeks, these two critical nights proved the worth of good defensible terrain in combination with good leadership. The Germans lost the tactical initiative during these two days and this provided the Allies time to plan a continuation of their offensive. Although, the devastation on this battlefield continued, the Allies had momentarily regained much confidence in themselves and their leaders. A

high fighting standard was set during the First Battle of Ypres by the British forces who held a wide sector of defense against an enemy four to seven times their strength.⁸³

The Battle of the Imjin River

22 to 25 April, 1951

On 27 June, 1950, the North Korean People's Army crossed the 38th parallel and thus began the Korean War. It was a direct challenge to the newly formed United Nations. The North wanted a unified, communist dominated, Korean peninsula. Had it not been for the response of the United States in concert with the United Nations, the North may have accomplished their objective.

After several months of intense fighting which forced the North Korean Army to flee back across the original border, communist China decided to intervene. The Chinese significantly raised the stakes of the war mainly due to the size of their army. China's plan was a phased one with the ultimate objective of saving the North Korean Army from destruction and driving the United Nations forces from Korea.⁸⁴ The subsequent fighting turned the war into a long indecisive struggle which left the country divided at the 38th parallel where it all began.

The fifth phase of the Chinese plan was an attack south toward Seoul. During this powerful offensive to regain what they had lost during previous combat, the Chinese ran into the 1st Battalion, Gloucestershire Regiment. The Gloucestershire's position was a critical defensive position on the far left flank of 1st Corps. They were the pivot of a retreating line of troops which meant they had to conduct an extremely slow retreat to the south. This allowed the forces in the east to retreat at a faster pace. If they failed, the U.S. forces to the north-east could be cut off.⁸⁵ The Gloucesters essentially sacrificed themselves on this isolated position and defended at all costs which allowed other forces to withdraw.

1st Battalion, the Gloucesters occupied, fought, and were eventually forced to surrender in the area of Choksong, North Korea. Choksong is typical of most remote

Korean villages. It sits in the Sibyon-ni approach along a main attack corridor to Seoul, just north of the Imjin River. The dominant terrain feature slightly to the east is the Kamak-San mountain that towers above all other features within sight. The battalion consisting of five companies, a mortar troop, and some gunner observation posts acting as reconnaissance occupied the key terrain blocking enemy mobility corridors into Choksan. It was closing in on the end of April, springtime, and the soldiers of the Gloucestershire Regiment sat and contemplated what the next few days would bring.⁸⁶

Forward on a piece of terrain called Castle Hill, which commands the long spurs that rise from the southern bank of the Imjin River, was Alpha Company. These were a mixture of seasoned and green men, but were recognized as the best in the battalion. Across a road to the east was Delta Company. They claimed some of the houses of Choksong and had the mission of guarding the eastern flank of the road that led from the river. This road winds its way north through numerous villages and hamlets, and is essentially the enemy's main approach into the battalion's defensive sector.

South of Alpha and Delta Company, positioned among some high cliffs, were Bravo and Charlie Company. They were disposed with their backs to the Kamak-san Mountain. The Support Company, scattered throughout the defense, had its anti-tank and machine gunners in appropriate positions to provide support when needed. The mortars were concentrated behind Charlie Company, and Battalion Headquarters was established slightly further to the south on either side of a ford.

The overall terrain provided 1st Battalion with excellent observation of the surrounding area with a view looking toward North Korea. The soldiers sat in this terrain, "in their observation posts, in their night listening posts along the river, on the peaks of the hills and in the valleys...waiting."⁸⁷

The Chinese plan was a simple one. They were to conduct a silent night assault straight through the battalion's positions. Once they conducted their violent assault, the Chinese believed the remaining British forces would quickly withdraw. The larger part

of their effort was to attack and destroy the whole left wing of the UN 3rd Division.⁸⁸ This would then open the way for a direct assault on Seoul, the capitol of South Korea. The enemy wanted to move quickly by securing crossing sites over the Imjin River meeting a timetable for their attack. However, he lacked a system of good communication which caused him to have difficulties maneuvering. The friendly forces further disrupted this with counterattacks not allowing the enemy any time to gather his strength.⁸⁹

During the first night enemy forces began to leak into Alpha Company's positions. Small patrols, then larger elements began to force a river crossing at a site below the company near Castle Hill. These forces were ambushed and beaten back. However, during the battle the enemy was not to be denied these crossing sites. "Just after dawn...[the A Company commander reported to higher]...we've lost Castle Site. I am mounting a counterattack now but I want to know whether to expect to stay here indefinitely or not. If I am to stay on, I must be re-inforced as my numbers are getting very low."⁹⁰ The answer he received was to hold his position at all cost.

The Alpha Company commander, realizing his situation was getting worse, continued to aggressively conduct his defense. Even though his forces were far outnumbered he managed a series of minor counterattacks seizing the initiative from the enemy and maintaining an element of surprise within his defense. One of these counterattacks was conducted by Lieutenant Curtis, a platoon leader in Alpha Company. Lieutenant Curtis was ordered to conduct a counterattack to dislodge the enemy from the key terrain around Castle Hill. There were two intense moments of heavy fighting, at which time the lieutenant was killed only steps away from his objective, that caused the enemy to make "no further effort to exploit their success in the immediate area; had they done so, the eventual withdrawal of the company might well have proved impossible."⁹¹ During this horrific period of combat not only was Lieutenant Curtis killed, but the company commander as well.

For these and other heroic efforts 1st Battalion received the Distinguished Unit Citation (U.S.) for these three crucial days of the Korean war. The citation declares, "The courageous soldiers of the battalion and attached unit were holding the critical route selected by the enemy for one column of the general offensive designed to encircle and destroy 1 Corps."⁹² Had the Gloucesters failed to maintain this decisive defensive position, 1 Corps may well have been cut off and destroyed. The actions of 1st Battalion may have saved hundreds if not thousands of lives.

Lieutenant-Colonel James Carne, the battalion commander, played a vital role during this defensive battle. His leadership throughout the fight was cited as the one element that held the defense together long enough for them to accomplish their mission. For his gallantry, Lieutenant-Colonel Carne received the Victoria Cross, the highest battlefield decoration granted during wartime by the British Government.⁹³

Had Lieutenant-Colonel Carne and officers like Lieutenant Curtis not conducted themselves in the manner they did, their unit may very well have been completely destroyed. As it was, they fought the attacking Chinese valiantly for a period of three days. Having held their position and knowing full well the consequences for their division and 1st Corps if they did not hold, eventually caused them to surrender. Although they remained in captivity for the duration of the Korean War, the 1st Battalion, Gloucestershire Regiment, accomplished their mission.

While it appears that the Gloucesters reached a point of culmination, they did so after destroying hundreds of Chinese forces and successfully accomplishing their mission. Had combat ratios been done beforehand it would have clearly demonstrated that the Chinese far exceeded the Gloucesters in combat power. What amounted to a battalion task force faced a Chinese Corps-sized element conducting an envelopment operation.

The critical elements of the Gloucesters defense amounted to the dominant terrain they occupied and the outstanding leadership displayed by their battalion commander. They managed to retain the initiative as long as they had the capability to counterattack.

The principle of surprise achieved by their tenacious spirit when conducting these counterattacks brought them additional advantages. Although the Chinese knew this position was held by a fairly small sized unit, the ferocity of their defense caused the Chinese to commit more forces than they had originally planned and this significantly disrupted their timetable. Even though the Gloucesters were forced to surrender, they came away from this fight as heroes. Their story is one of bravery and success. They may have reached a culminating point in the defense, but it was only after continuously acting against a numerically superior force.

ANALYSIS

A central theme of each case study is the difference in combat power at the point of battle between the attackers and defenders. At Gettysburg, Chamberlain's badly beaten regiment of less than four hundred faced elements of a division, consisting of over a thousand soldiers. By the end of the day on Little Round Top, Chamberlain had lost more than a third of his regiment. However, during his counterattack, the Twentieth Maine captured over 400 prisoners and killed or wounded 150. During the Battle of Ypres, the Germans, at times, outnumbered the Allies almost seven to one. General Bulfin's well orchestrated counterattack stalled the German offensive and filled a large gap in the Allied defense. Two of his battalions consisting of less than a thousand men charged across the trenches and hedges into the German 45th Reserve Division. The counterattack cost the Germans 490 killed and 791 captured, while the British cost was 47 killed and 184 wounded.⁹⁴

In Korea, the Gloucesters were overwhelmed as a battalion-sized task force of roughly 800 men. They faced the full savage assault of the 83rd Chinese Communist Army. The casualties were extensive for both sides. The Gloucesters lost over two thirds of their force. The Chinese figures are difficult to determine. However, after their surrender, Captain Farrar-Hockley counted 216 Chinese killed. He writes in The Edge of the

Sword, "If this was the toll on one hill slope in one morning, I could not estimate what casualties they must have lost throughout the battle area over the whole period."⁹⁵

Although Chinese casualty figures may never be known, it is certain the Gloucesters killed or wounded numerous enemy.

Colonel Chamberlain, Brigadier-General Bulfin, and Lieutenant-Colonel Carne all faced an enemy with greater combat power than each had to fight with. Even though their force ratios were at a distinct disadvantage, this was not a factor that entered into whether they succeeded or failed. There were other factors such as defensible terrain, surprise, initiative, and leadership that each force had in common. Given their unique situations and conditions, each defender, in their own way, was successful.

The first critical factor of their defenses were the benefits the terrain offered by the positions they held. The terrain in each case provided these units with the advantage of interior lines, extended visibility into the enemy's positions, excellent cover and concealment, and most importantly, the element of surprise. This last point is key because these units used terrain to achieve surprise at places of their choosing along their lines, and to deny it from the enemy.

The element of surprise each unit achieved forced their enemies to become de-synchronized. It allowed the defending commanders to enter the enemy commander's decision cycle and force their will upon them. Although surprise remained relatively short lived, it caused the attacking commanders to all re-think their plans and shift their focus elsewhere.

This shift in equilibrium during a fight usually tilts to the opponent who lands the first good punch. This opponent will normally have the initiative. If the defender can regain composure, it is essential to strike back to recapture lost momentum. Initiative is an element like surprise, that can be fleeting. However, each case provides us with examples of commanders and units that received that first punch and immediately struck

back. By changing the terms of the fight and setting the conditions the way they wanted, each commander captured the initiative.

Chamberlain's men demonstrated to the enemy that their end of the Union line would require a much greater effort to overcome. During the Battle of Ypres, the Allies displayed tremendous courage against nearly seven to one odds. They demonstrated to the Germans that they would hold the rim around Ypres and were prepared to offensive operations. The Gloucesters seized and maintained the initiative right up to the moment of surrender. Had they not done so, disastrous events may have resulted, leading to a different outcome at this stage in the Korean War.

Each theorist acknowledges that a defense is not a defense unless active measures are planned. Each defense used the counterattack either throughout the entire defense or at selected points. The leaders all understood that a time was approaching where an action had to occur. Each leader realized an attempt to shift the tide of battle was required. Chamberlain recognized this shift, and almost in a moment of desperation, quickly seized it. General Bulfin realized the proper moment was upon his forces and seized it by conducting a well thought out, meticulously developed counterattack. Lieutenant-Colonel Carne understood his *fait accompli* and continuously acted to accomplish his mission which prolonged the time for his unit's eventual surrender. These leaders all seemed to have the intuition to sense what to do at the critical moment. Their culminating point did not result in a failure to act, it resulted in action taken to achieve success or defer eventual surrender, in the case of the Gloucesters.

CONCLUSION

The ultimate objective of the defense is to create the opportunity to shift to the offensive.⁹⁶ Carl von Clausewitz discussed the defense as a two-phased operation. The first phase is the defense with its inherent passive activities which attempt to purely out-endure the attacker. The second phase is the counterattack which is the true test of the

defender. The whole concept of culmination means that a climax or conclusion of some event is about to occur. The defining feature of a culminating point for the defender is no longer waiting but acting. This action is the counterattack. Upon recognizing this point, the defender will launch into a violent assault to defeat his enemy.

"The dialectic relationship between attack and defense [in tactics] centers [around] the concept of the culminating point."⁹⁷ Culmination in the attack is the conclusion of acting beyond a point where the attacker's combat power, momentum, or moral strength no longer exceeds that of the defender. Culmination in the defense is the conclusion of a series of climactic events during the course of the fight. That is, the defender always has to act to "parry the blow," otherwise there is no defense. There is only waiting, the pure form of resistance; waiting to be destroyed or taken prisoner.

The theorists all discuss the relationship of attack to defense. They all agree that only in the attack can decisive victories be gained. A pure defense normally results in maintaining what one initially had. For example, "The point of culmination," as stated by Clausewitz, "will...be reached when the defender must make up his mind and act, when the advantages of waiting have been completely exhausted."⁹⁸ This making up of the mind demonstrates the importance of the intuitive judgement of the commander. The concept of culmination for any form of war, be it offensive, defensive, or retrograde is essentially changing from one form to the other.

Every defense is fought under different conditions. Therefore, every defending commander must plan his defense accordingly. However, the plan will usually include some transition from the defense to the offense. This transition should be the defining moment of the culminating point in the defense. If the defending commander senses his culminating point approaching, he should prepare his forces to ready themselves for the ultimate in controlled violence; the counterattack. As Clausewitz stated, the greatest moment for the defense is "a sudden powerful transition to the offensive-the flashing sword of vengeance."⁹⁹

The commander is the one who sets the "flashing sword of vengeance" in motion. It is a function of his intuitive creative thought process that drives his operation. The concept of culmination should not be thought of as a mathematical ratio that can be used on the battlefield. While combat power ratios are useful in planning, the natural friction of war usually makes them obsolete after the first shots are fired. The defending commander must make use of all the advantages offered by the defense.

For the most part, terrain may provide the defender the greatest advantage. It allows the commander to conceal his forces and confuses the enemy as to where and when he will strike next. This means stealing back the initiative with counterattacks, using the element of surprise throughout. It also means applying the dynamic of leadership in tandem with maneuver, firepower, and protection whenever possible. The commander's sudden sense of culmination is more a flash of brilliance or despair, than some planned moment in the fight.

IMPLICATIONS

The term culmination is applied more these days in campaign planning due to the emphasis in FM 100-5 and numerous joint publications, such as Joint Publication 5-00.1, Doctrine for Joint Campaign Planning and JCS PUB 3-0, Doctrine for Unified and Joint Operations. At the operational and strategic levels of war, culmination is a sound concept, especially for the attacking force. This is due in large measure to extreme logistical considerations found at these levels for forces contemplating offensive operations. The more distant the objective, the more difficult the logistics, and it is usually the attacking force that runs out of resources first.

At the tactical level of war culmination is just as sound but not as well understood. This is because many company grade officers serving in staff positions have not been sufficiently exposed to this concept. Additional exposure to terms like culmination and other concepts of operational design, such as center of gravity, decisive points, and lines

of operations should come during their advanced courses or during attendance at the Combined Arms Service's Staff School (CAS3). Realizing the importance of culmination and understanding its application is a necessary aspect of planning and executing tactical operations. Recognizing if and when a transition will occur in defensive warfare enables tactical units to prepare for this event. It could mean the difference between failure or success to a commander.

In tactics, culmination may be nothing more than an overextension, exhaustion, or reduction in combat power. However, there is a need to understand what culmination means. There is also a requirement for staff officers and commanders at every level to think through the "what ifs" when planning tactical operations before their units reach that point. As Clausewitz stated, there is no infallible means of telling when culmination will occur. What matters most is to detect this point with discriminate judgement and act accordingly.¹⁰⁰

Culmination is an important concept that requires continuous assessment. Clausewitz presents it, but like many of the ideas in his book, culmination requires greater thought. However, it is a concept that staff officers and commanders must consider when planning operations, be they in tactics or at the operational and strategic levels of war.

Culmination has tremendous utility for the tactical defender. It is the defender who holds the advantages of when and where to counterattack and cause the attacker to culminate first. It means he must be prepared to change or transition from the defense to the counterattack quickly and violently. The role culmination plays in the defense is a vital concept to understand and, if necessary, apply during execution. Culmination essentially comes down to a sensing by the commander, using his intuitive judgement, in combination with every other aspect of his decision making process, to determine when that transition will occur.

ENDNOTES

¹United States Army, Field Manual 100-5, Operations. Washington, DC: HQDA, 1993, p. 9-1.

²*Ibid*, p.6-8.

³Clausewitz, Carl von, On War. Edited and Translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984, p. 528.

⁴Field Manual 100-5, Operations. 1993, p. 2-5.

⁵United States Army, Field Service Regulations, FM 100-5 OPERATIONS. Washington, DC: US Government Printing Office, May 1941, p. 23.

⁶Clausewitz, On War, p. 361.

⁷*Ibid*, p. 362.

⁸Field Manual 100-5, Operations. 1993, p. 2-6.

⁹Tukhachevskiy, Mikhail, New Problems In Warfare. from Art of War Colloquium, US Army Command and General Staff College, Ft Leavenworth, KS: Nov, 1983, p. 66.

¹⁰Field Manual 100-5, Operations. 1993, p. 2-10.

¹¹The Living Webster Encyclopedic Dictionary of the English Language. Chicago, Illinois: The English Language Institute of America, Great Master Edition, 1975, p. 245.

¹²Paret, Peter, Essay on Clausewitz, Part Two Expansion of War in Makers of Modern Strategy. Princeton, New Jersey: Princeton University Press, 1986, p. 198.

¹³Clausewitz, On War. p. 383.

¹⁴*Ibid*, p. 379.

¹⁵*Ibid*, p. 379-380.

¹⁶Howard, Michael Eliot, Clausewitz. Oxford: Oxford University Press, 1983, p. 54.

¹⁷Ibid.

¹⁸Leonard, Roger Ashley, A Short Guide to Clausewitz On War, First American Edition. New York: G. P. Putnam's Sons, 1967, p. 184.

¹⁹Ibid, p. 164.

²⁰ Ibid, p. 698. This section of Brodie's guide, he states, "this chapter deserves consideration by itself. After a long chain of dated, abbreviated, or otherwise unsatisfactory chapters, we come at last to one of basic importance, which is also the concluding chapter of this book [The Attack]." No where else does Brodie discuss the importance of this term.

²¹Ibid, p. 570.

²²Ibid, p. 572-573.

²³Tse-Tung, Mao, Selected Writings of Mao Tse-Tung. Ft. Leavenworth, Kansas: US Army Command and Genral Staff College, Combat Studies Institute, 1990, p. 105.

²⁴Ibid, p. 115.

²⁵Sun Tzu, Transl. by Samuel B. Griffith, The Art of War. London: Oxford University Press, 1972, p. 42.

²⁶Ibid, p. 85.

²⁷Jomini, Antoine Henri, Summary of the Art of War from Roots of Strategy Book 2. Harrisburg, Pennsylvania: Stackpole Books, 1987, p. 462-463.

²⁸Ibid, p. 462.

²⁹Ibid, p. 462-463.

³⁰Ibid, p. 497.

³¹Esper, Michael H., Defensive Culmination: A Useful Piece of Theory? Paper, School of Advanced Military Studies. Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1991, p. 9.

³²Jomini, Summary of The Art of War. p. 464.

³³Svechin, A. A., Strategy. Minneapolis: East View Press, 1992, p. 20.

³⁴Clausewitz, On War. p. 385.

³⁵Svechin, Strategy. p. 52.

³⁶Ibid.

³⁷Tukhachevskiy, Mikhail, New Problems In Warfare. p. 35.

³⁸Ibid, p.66.

³⁹Ibid, p. 71.

⁴⁰Paret, Peter, Essay on Clausewitz, Part Two Expansion of War in Makers of Modern Strategy. p. 198.

⁴¹Svechin, Strategy. p. 52.

⁴²Field Manual 100-5, Operations. 1993, p. v.

⁴³Field Manual 100-5, Operations. 1986, p. i.

⁴⁴Field Manual 100-5, Operations. 1993, p. v.

⁴⁵Ibid.

⁴⁶Field Manual 100-5, Operations. 1986, p. 179.

⁴⁷Ibid.

⁴⁸Ibid, p. 109.

⁴⁹Ibid, p. 181.

⁵⁰Clausewitz, On War. p. 528

- ⁵¹Field Manual 100-5, Operations. 1986, p. 182.
- ⁵²Ibid, p. 140.
- ⁵³Ibid.
- ⁵⁴Field Manual 100-5, Operations. 1993, p. 6-8.
- ⁵⁵Clausewitz, On War. p. 699.
- ⁵⁶D'Este, Carlo, Decision in Normandy. New York: First Harper Perennial, 1982, p. 467.
- ⁵⁷Ibid, p. 468-469.
- ⁵⁸Field Manual 100-5, Operations. 1993, p. 9-1.
- ⁵⁹Ibid, p. v.
- ⁶⁰Norton, Oliver Willcox, The Attack and Defense of Little Round Top, Gettysburg, July 2, 1862, Gettysburg, Pennsylvania: Stan Clark Military Books, 1913, p. 212.
- ⁶¹Ibid.
- ⁶²Ibid.
- ⁶³Ibid.
- ⁶⁴Rittenhouse, Benjamin F., The First Day of the Battle of Gettysburg as seen From Little Round Top. A Paper read before the District of Columbia Commandery, 14 May, 1887 (13 pages). Washington, D.C.: Judd & Detweiller, Printers., 1887, p. 3.
- ⁶⁵Norton, The Attack and Defense of Little Round Top. p. 212.
- ⁶⁶Rittenhouse, The First Day of the Battle of Gettysburg as seen From Little Round Top, p. 6-7.
- ⁶⁷Wallace, Willard M., Soul Of The Lion. A Biography of General Joshua Chamberlain. New York: Thomas Nelson & Sons, 1960, p. 101.

⁶⁸Norton, The Attack and Defense of Little Round Top. p. 213.

⁶⁹Ibid.

⁷⁰Ibid.

⁷¹Wallace, Willard M., Soul Of The Lion, A Biography of General Joshua Chamberlain. p. 104

⁷²Farrar-Hockley, Anthony H., Death of an Army. New York: W. Morrow, 1967, p. 73.

⁷³German General Staff, Ypres, 1914 An Official Account, p. xiv.

⁷⁴Great Britain Historical Section, History of the Great War, Military Operations, France and Belgium, 1914. p. 129.

⁷⁵Ibid, p. 130.

⁷⁶Ibid, p. 168.

⁷⁷Ibid, p. 173.

⁷⁸German General Staff, Ypres, 1914 An Official Account. p. 42.

⁷⁹Great Britain, History of the Great War, Military Operations, France and Belgium, 1914. p. 177.

⁸⁰Farrar-Hockley, Anthony H., Death of an Army. p. 101.

⁸¹Ibid, p. 102-103. The counterattack killed 490 of the enemy and captured 791 including 352 wounded.

⁸²Ibid, p. 104.

⁸³Ibid, p. 180.

⁸⁴Cunningham-Boothe, Ashley and Farrar, Peter, British Forces in the Korean War. British Koreans Veterans Association: Reuben Holroyd Ltd., 1988, p. 4.

⁸⁵Ibid, p. 8.

⁸⁶Farrar-Hockley, Anthony, The Edge of the Sword. London, England: Frederick Muller LTD., 1954, p. 11-13.

⁸⁷*Ibid*, p. 13

⁸⁸*Ibid*, p. 24.

⁸⁹*Ibid*.

⁹⁰*Ibid*, p. 29.

⁹¹Cunningham-Boothe, Ashley and Farrar, Peter, British Forces in the Korean War, p. 172.

⁹² *Ibid*, p. 176.

⁹³*Ibid*, p. 171. His citation reads; The Battalion was heavily and incessantly engaged by vastly superior numbers of enemy, who repeatedly launched mass attacks, but were stopped at close quarters. Throughout the entire engagement, [he displayed] a complete disregard for his own safety [while] inspiring the utmost confidence and the will to resist, amongst his troops.

⁹⁴The figures in this paragraph are drawn from three sources. For the Battle of Gettysburg, the source is The Attack and Defense of Little Round Top, pp. 215-217. For the The First Battle of Ypres, the source is Death of an Army, p. 103.

⁹⁵Farrar-Hockley, The Edge of the Sword. p. 73. Additionally, the figures represented in this paragraph are taken from two sources. They are British Forces in the Korean War, edited by Ashely Cunningham-Boothe and Peter Farrar, pp. 8 and 171-172, and The Edge of the Sword by Farrar-Hockley, pp. 49 and 73.

⁹⁶Field Manual 100-5, Operations. 1986/1993. The 1986 edition states, "The ultimate objective [of the defense] should be to turn to the offensive and to defeat the enemy decisively."(140), The 1993 edition states, "the greater intent of the defense is to force the attack to culminate,...to create the opportunity to shift to the offensive."(9-1).

⁹⁷Leonard, Roger Ashley, A Short Guide to Clausewitz On War. p. 31.

⁹⁸Clausewitz, On War. p. 383.

⁹⁹Clausewitz, On War. p. 370.

¹⁰⁰Clausewitz, On War. This thought is taken from two books in his works; first, Book Six, page 383, in his discussion on culmination in the defense, and Book Seven, page 528, culmination in the attack. In both books, Clausewitz places the determination of the culminating point squarely on the judgement of the commander.

BIBLIOGRAPHY

BOOKS

Alger, John I, The Quest For Victory. Westport, Conn: Greenwood Press, 1982.

Clausewitz, Carl von, On War. Edited and Translated by Michael Howard and Peter Paret. Princeton: Princeton University Press, 1984.

Corbett, Julian S., Some Principles of Maritime Strategy. Annapolis: Naval Institute Press, 1988.

Cunningham-Boothe, Ashley and Farrar, Peter, British Forces in the Korean War. British Koreans Veterans Association: Reuben Holroyd Ltd., 1988.

D'Este, Carlo, Decision in Normandy. New York, New York: First Harper Perennial, 1982.

Farrar-Hockley, Anthony H., Death of an Army. New York: W. Morrow, 1967.

Farrar-Hockley, Anthony, The British Part in the Korean War Volume I, A Distant Obligation. London, England: HMSO, 1990.

Farrar-Hockley, Anthony, The Edge of the Sword. London, England: Frederick Muller LTD., 1954.

German General Staff, Ypres, 1914 An Official Account Published by Order of the German General Staff. London: Constable and Company, 1919.

Great Britain Historical Section, History of the Great War, Military Operations, France and Belgium, 1914. London: Macmillan and Co., LTD, 1925.

Howard, Michael Eliot, Clausewitz. Oxford: Oxford University Press, 1983.

Jomini, Antoine Henri, Summary of the Art of War from Roots of Strategy Book 2. Harrisburg, Pennsylvania: Stackpole Books, 1987.

Leonard, Roger Ashley, A Short Guide to Clausewitz On War, First American Edition. New York: G. P. Putnam's Sons, 1967.

Manstein, Erich von, Lost Victories. Novata, California: Presidio Press, 1982.

Menning, Bruce, Bayonets Before Bullets. Bloomington, Indiana: Indiana University Press, 1992.

Norton, Oliver Willcox, The Attack and Defense of Little Round Top, Gettysburg, July 2, 1862, Gettysburg, Pennsylvania: Stan Clark Military Books, 1913.

Paret, Peter, Paret's essay on Clausewitz in Makers of Modern Strategy, . Princeton, New Jersey: Princeton University Press, 1986.

Rittenhouse, Benjamin F., The First Day of the Battle of Gettysburg as seen From Little Round Top, A Paper read before the District of Columbia Commandery, 14 May, 1887 (13 pages). Washington, D.C.: Judd & Detweiller, Printers., 1887.

Schwink, Otto, YPRES, 1914: An Official Account. London, England: Constable and Company, LTD., 1919.

Slim, Viscount, Defeat Into Victory. London: Macmillan Publishers Limited, 1987.

Sun Tzu, Transl. by Samuel B. Griffith, The Art of War. London: Oxford University Press, 1972.

Svechin, A. A., Strategy. Minneapolis: East View Press, 1992.

The Living Webster Encyclopedic Dictionary of the English Language. Chicago, Illinois: The English Language Institute of America, Great Master Edition, 1975.

Tse-Tung, Mao, Selected Writings of Mao Tse-Tung. Ft. Leavenworth, Kansas: US Army Command and Genral Staff College, Combat Studies Institute, 1990.

von Leeb, Ritter, Field Marshall, Defense from Roots of Strategy Book 3. Harrisburg, Pennsylvania: Stackpole Books, 1991.

Wallace, Willard M., Soul Of The Lion. A Biography of General Joshua Chamberlain. New York: Thomas Nelson & Sons, 1960.

GOVERNMENT PUBLICATIONS

United States Army, Field Manual 22-100. Military Leadership. Washington, DC: HQDA, October, 1983.

United States Army, Field Manual 100-5. Operations. Washington, DC: HQDA, 1986.

United States Army, Field Manual 100-5. Operations. Washington, DC: HQDA, 1993.

United States Army, Field Service Regulations, FM 100-5 OPERATIONS. Washington, DC: US Government Printing Office, May 1941, p. 23.

UNPUBLISHED DISSERTATION, THESES, and PAPERS

Esper, Michael H., Defensive Culmination: A Useful Piece of Theory? Paper, School of Advanced Military Studies. Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1991.

Franklin, Charles D., Time, Space, and Mass at the Operational Level of War: The Dynamics of the Culminating Point. Paper, School of Advanced Military Studies. Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1988.

Hamilton, William, Defensive Culmination - When Does the Tactical Commander Counterattack? Paper, School of Advanced Military Studies. Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1990.

Hammond, Charles O., Does the Culminating Point Exist at the Tactical Level? Paper, School of Advanced Military Studies. Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1989.

Herbert, Paul H. Major, Deciding What Has to Be Done: General William E. Depuy and the 1976 Edition of FM 100-5. Leavenworth Papers, Combat Studies Institute, Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, July, 1988.

Johnson, Michael T., Counterattack: The Key to Success in the Defense. Paper, School of Advanced Military Studies. Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1988.

Kirchbach, P. V., Clausewitz and the Culmination Point of Victory. Study Project, US Army War College. Carlisle Barracks, PA: US Army War College, 1989.

Redlinger, Mark J., Hans Delbruck and Clausewitz's Culminating Points. Paper, School of Advanced Military Studies. Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1988.

Taddonio, Frank T., The Concept of the Culminating Point for the Attack. Paper, School of Advanced Military Studies. Fort Leavenworth, Kansas: U.S. Army Command and General Staff College, 1988.

Tukhachevskiy, Mikhail, New Problems In Warfare. from Art of War Colloquium, US Army Command and General Staff College, Ft Leavenworth, KS: Nov, 1983.

ARTICLES

Barnett, Cornelli, The Impact of Surprise and Initiative in War. The Royal United Services Institute, Vol. 129, No. 2, June, 1984.

Schneider, James J. & Izzo, Lawrence L. "Clausewitz's Elusive Center of Gravity". Parameters. September, 1987, pp. 46-57.

Wass de Czege, Huba, "Clausewitz: Historical Theories Remain Sound Compass References; The Catch is Staying on Course". Army. September, 1988, pp. 37-43.